AMENDMENTS TO THE CLAIMS:

Please amend claim 14 as follows.

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (previously presented) An optoelectronic light emitting device comprising:

at least one layer comprised of one of a dielectric material and a semiconductor material,

first and second electrodes, said electrodes sandwiching said at least one layer, wherein at least one of the electrodes is a thin semitransparent metal covering and separating said entire layer from air,

said metal electrode having two surfaces, at least one of said surfaces including a periodic microstructure, wherein the structure and positioning of the periodic microstructure is such that surface plasmon (SP) polariton modes are supported mainly at an interface between the layer and the metal electrode and are substantially Bragg scattered into propagating light, said propagation being out of the plane of the layer and the metal electrode, and the device having a luminescence emission spectrum exhibiting:

a first surface plasmon (SP) polariton mode contribution which is associated with avoidance of destructive interference corresponding to two scattering processes and which would otherwise counteract that contribution; and

a second SP polariton mode contribution corresponding to one scattering process.

2. (previously presented) The device according to claim 1 wherein the periodic microstructure is selected from one of the following structures:

a respective grating type microstructure on each of said metal electrode's two surfaces, the microstructures are out of phase sufficiently to counteract destructive interference associated with antiphase effects arising from different SP polariton mode scattering processes;

a grating type microstructure present only at an interface between the metal electrode and the at least one layer; and

a grating type microstructure present at a metal electrode/air interface only.

3. (withdrawn) The device according to claim 2 wherein the periodic microstructure is said grating type structure present at the metal electrode/air interface further including an encapsulating layer on the metal electrode.

4. (previously presented) The device according to claim 1 wherein the periodic microstructures are one of a periodic sequence of valleys and hills and a periodic sequence of grooves.

5. (cancelled).

6. (previously presented) The device according to claim 1 wherein the periodic microstructure is periodic in more than one direction on the surface.

7. (previously presented) The device according to claim 1 wherein the periodic microstructures sub-wavelength.

8. (previously presented) The device according to claim 1 wherein the metal comprising electrode is an aluminum cathode.

9. (cancelled).

10. (previously presented) The device according to claim 1 wherein the optoelectronic light emitting device is an organic light emitting diode.

11. (previously presented) An optoelectronic device comprising:

at least one layer comprised of one of a dielectric material and a semiconductor material,

first and second electrodes, said electrodes sandwiching said at least one layer, wherein at least one of the electrodes is a thin semitransparent metal covering said entire layer,

said metal electrode having two surfaces, said metal electrode comprises a grating type respective periodic microstructure upon said two surfaces, wherein the microstructures of the two metal surfaces are out of phase by substantially π radians, and wherein the periodic microstructures are positioned and structured such that surface plasmon (SP) polariton modes are supported mainly at an interface between the layer and the metal electrode and are substantially Bragg scattered into propagating light, said propagation being out of the plane of the layer and the metal electrode, and the device having optical properties showing an SP polariton mode contribution from scattering at both said metal electrode surfaces and associated with avoidance of destructive interference which would otherwise counteract that contribution.

12. (withdrawn) An optoelectronic device comprising:

at least one layer comprised of one of a dielectric and semiconductor material,

first and second electrodes, said electrodes sandwiching said at least one layer, wherein at least one of the electrodes is a thin semitransparent metal covering said entire layer,

said metal electrode having two surfaces, a grating type periodic microstructure is present only at the interface between the metal electrode and the at least one layer, wherein the structure and positioning of the periodic microstructure is such that surface plasmon (SP) polariton modes are supported mainly at an interface between the layer and the metal electrode and are substantially scattered into propagating light, said propagation being out of the plane of the layer and the metal electrode.

13. (withdrawn) An optoelectronic device comprising:

at least one layer comprised of one of a dielectric and semiconductor material,

first and second electrodes, said electrodes sandwiching said at least one layer, wherein at least one of the electrodes is a thin semitransparent metal covering said entire layer,

said metal electrode having two surfaces, a periodic microstructure is present at the metal electrode/air interface only and wherein the structure and positioning of the periodic microstructure is such that surface plasmon (SP) polariton modes are supported mainly at an interface between the layer and the metal electrode and are substantially scattered into propagating light, said propagation being out of the plane of the layer and the metal electrode.

14. (currently amended) An optoelectronic device comprising:

at least one layer comprised of one of a dielectric material and a semiconductor material,

first and second electrodes, said electrodes sandwiching said at least one layer, wherein at least one of the electrodes is a thin, continuous, non-perforated semitransparent metal covering said ~~entire~~ layer,

said semitransparent metal electrode having two surfaces, said device having at least one of said surfaces including or supporting a periodic microstructure, wherein the structure and positioning of the periodic microstructure is such that surface plasmon (SP) polariton modes are supported mainly at an interface between the layer and the semitransparent metal electrode and are substantially coupled to propagating radiation out of the plane of the layer by Bragg scattering, and the device has optical properties showing an SP polariton mode contribution which is associated with avoidance of destructive interference which would otherwise counteract that contribution.

15. (previously presented) The device according to claim 14, wherein the periodic microstructure is on one of the two surfaces of said semitransparent metal electrode.

16. (withdrawn) the device according to claim 14, wherein said at least one surface including a periodic microstructure is a surface of a dielectric layer located on one of said metal electrode surfaces.

17. (previously presented) The device according to claim 14, wherein the periodic microstrutures are one of a periodic sequence of valleys and hills, and a periodic sequence of grooves.

18. (previously presented) The device according to claim 14 consisting of an organic photovoltaic or photodiode device, and wherein:

a) at least one layer is a thin stratified layer of organic semiconductor sandwiched by the first and second electrodes;

b) the stratified layer has an n-type semiconductor region in contact with one of the electrodes and a p-type semiconductor region in contact with the other of the electrodes.

19. (previously presented) An optoelectronic device comprising:

a) at least one layer comprising one of a dielectric material and a semiconductor material,

b) first and second electrodes, said electrodes sandwiching said at least one layer, wherein at least one of the electrodes is a thin, non-perforated, continuous semitransparent metal electrode covering said layer and located between said layer and air, and having a first interface with said layer and a second interface which is either with air or alternatively with an intervening dielectric layer between the second interface and air and having an air contacting surface,

c) said metal electrode having two surfaces at respective ones of said metal electrode interfaces, at least one of said metal electrode surfaces and said intervening dielectric layer air contacting surface (if available) having a periodic microstructure, wherein the structure and positioning of the periodic microstructure is such that in operation:

i) a first surface plasmon (SP) polariton mode supported by the metal electrode at the first interface undergoes two Bragg scattering processes,

ii) a second SP polariton mode supported by the metal electrode at the second interface undergoes one Bragg scattering process,

iii) the Bragg scattering processes couple the first and second SP polariton modes to radiation propagating obliquely to the said at least one layer,

iv) destructive interference and associated cancellation of coupling to radiation arising from different scattering processes in antiphase is avoided for the first SP polariton mode, and

v) the optoelectronic device exhibits optical properties showing contributions from both the first SP polariton mode and the second SP polariton mode.